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| 10/820,495      | 04/07/2004  | Kuo-Chih Lee         | 250119-1160         | 7405             |

24504 7590 10/27/2005

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EXAMINER

CHEN, WEN YING PATTY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2871

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/820,495

Applicant(s)

LEE ET AL.

Examiner

Wen-Ying P. Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-13 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 8 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's Amendment filed Aug. 25, 2005 has been received and entered. Claim 18 is newly added per the Amendment. Therefore, claims 1-18 are not pending in the current application.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 11-13 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Horiuchi et al. (US 5729310).

With respect to claim 1: Horiuchi et al. disclose in Figure 5 a liquid crystal display comprising:

a front bezel (element 5) having a first fastened member (element A, as indicated in figure below); a frame (element 1) deposited below the front bezel; and

a diffuser plate (element 13) deposited below the frame and having a second fastened member (element 17);

wherein the frame has a first fastening member (element 3) with respect to the first fastened member and a second fastening member (element 17) with respect to the second

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fastened member; the first fastening member and the second fastening member are respectively coupled with the first fastened member and with the second fastened member simultaneously so that the front bezel, the frame, and the diffuser plate are integrated as a whole when the entire display assembly is put together.

As to claim 2: Horiuchi et al. disclose in Figure 5 that the liquid crystal display further comprises a panel (element 4) disposed between the front bezel (element 5) and the frame (element 1); wherein the panel is fastened between the front bezel and the frame while the first fastening member is coupled with the first fastened member.

As to claim 3: Horiuchi et al. disclose in Figure 5 that the liquid crystal display further comprises a multilayer optical film (element 14) disposed between the frame (element 1) and the diffuser plate (element 13); wherein the multilayer optical film (element 14) is fastened between the frame and the diffuser plate while the second fastening member (element 17) is coupled with the second fastened member (element 17).

As to claim 4: Horiuchi et al. disclose in Figure 5 that the liquid crystal display further comprises:

a panel (element 4) disposed between the front bezel (element 5) and the frame (element 1); and

a multilayer optical film (element 14) disposed between the frame (element 1) and the diffuser plate (element 13);

wherein the frame comprises an upper surface (element C, as indicated in the figure below), a bottom surface (element D, as indicated in the figure below) and a side extending section (element E, as indicated in the figure below); the side extending section is perpendicular

to the bottom surface; the first fastening member is disposed on the side extending section of the frame, and the second fastening member is disposed on the bottom surface of the frame;

wherein the front bezel comprises a bottom surface (element F, as indicated in the figure below) and a side surface (element G, as indicated in the figure below); the side surface of the front bezel is perpendicular to the bottom surface of the front bezel and the first fastened member is formed in the side surface of the front bezel;

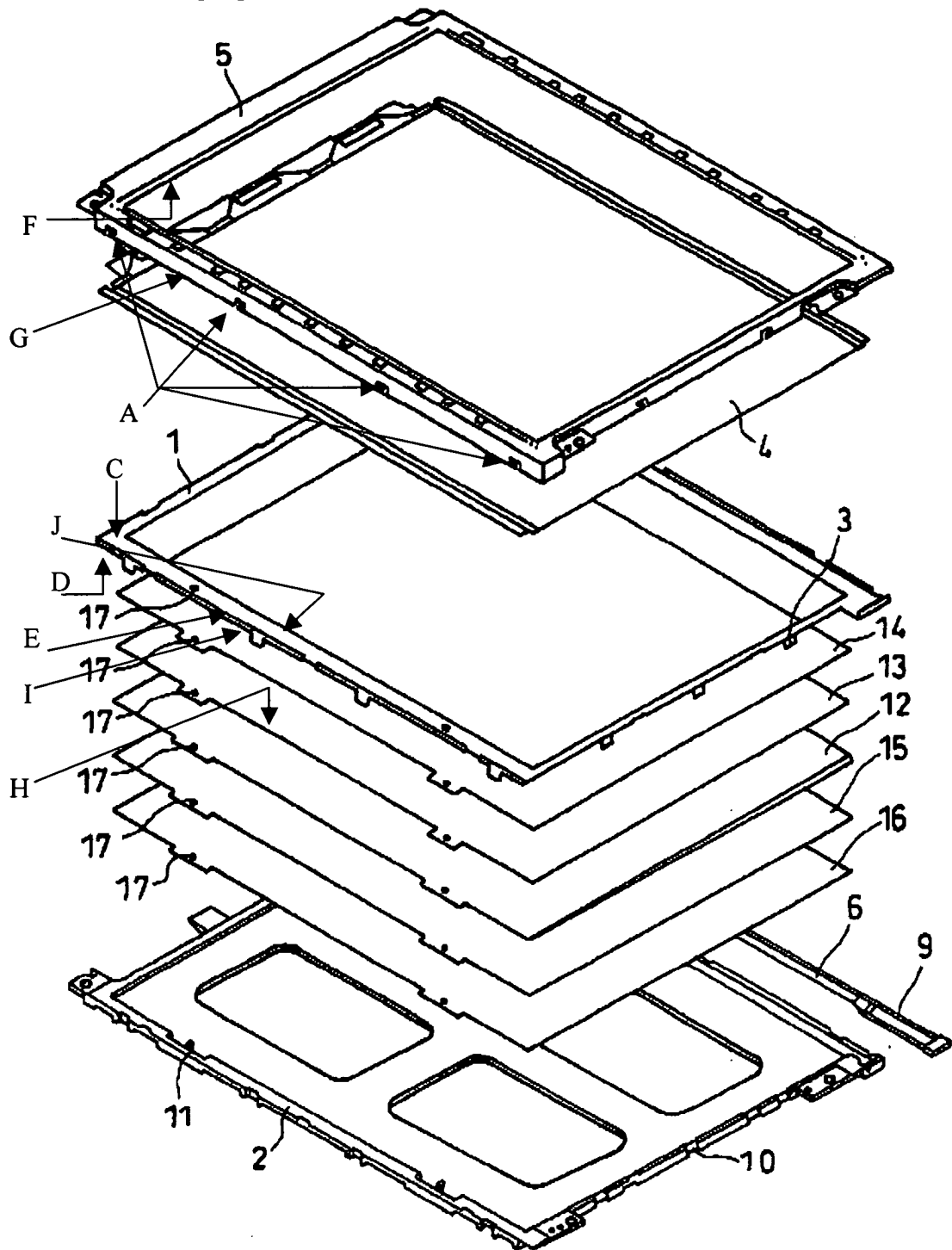
wherein the diffuser plate comprises an upper surface (element H, as indicated in the figure below) opposite to the bottom surface of the frame and the second fastened member is formed in the upper surface of the diffuser plate; the first fastening member and the second fastening member are respectively couple with the first fastened member and with the second fastened member simultaneously so that the front bezel (element 5), the panel (element 4), the frame (element 1), the multilayer optical film (element 14), and the diffuser plate (element 13) are integrated as a whole.

As to claim 5: Horiuchi et al. disclose in Figure 5 that the frame further comprises an exterior edge (element I, as indicated in the figure below) and an interior edge (element J, as indicated in the figure below); the first fastening member (element 3) is disposed on the exterior edge of the frame and the second fastening member (element 17) is disposed on the interior edge of the frame.

As to claim 6: Horiuchi et al. disclose in Figure 5 that the front bezel (element 5) comprises a bottom surface (element F, as indicated in the figure below) and a side surface (element G), the side surface (element E) of the frame is perpendicular to the bottom surface (element D) of the frame, the bottom surface of the front bezel is opposite to the upper surface of



FIG. 5



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9-10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi et al. (US 5729310) in view of Hashimoto (US 5442470).

With respect to claims 9 and 15: Horiuchi et al. disclose all of the limitations set forth in the previous claims, but fail to specifically disclose that the frame is made of plastic.



However, Hashimoto teaches in Column 8 lines 52-68 and Column 9 lines 1-2 a display device comprising of a plastic frame member.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a liquid crystal display as taught by Horiuchi et al. wherein the frame is made of plastic as taught by Hashimoto, since Hashimoto teaches that having plastic frames reduce capacitive coupling, thus, improve luminance (Column 8, lines 52-62).

As to claims 10 and 16: Horiuchi et al. disclose all of the limitations set forth in the previous claims, but fail to specifically disclose that the frame is manufactured by mechanical shooting.

However, Hashimoto teaches in Column 5 lines 42-55 that the frame member is formed by mechanical shooting (mechanical shooting is understood in the art to be the equivalent process of extrusion).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a liquid crystal display as taught by Horiuchi et al. wherein the frame is formed by extrusion process as taught by Hashimoto, since Hashimoto teaches that the extrusion process improves production efficiency (Column 5, lines 46-55).

### ***Allowable Subject Matter***

Claim 18 is allowed.

The cited prior art, Horiuchi et al. (US 5729310) disclose in Figure 5 a frame (element 1) deposited below the front bezel (element 5) and having a hook (element 3); and a diffuser plate (element 13), deposited below the frame (element 1) and having a notch (element 17). However,

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Horiuchi et al. fail to disclose that the notch is coupled with the hook so that the frame and the diffuser plate are integrated as a whole, the hook, however, is coupled with the notch formed in the front bezel. The diffuser plate and the frame are coupled by means of pins and holes.

Therefore, claim 18 is allowable over the cited prior art.

Claims 8 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The cited prior art, Horiuchi et al. (US 5729310) disclose in Figure 5 that the first fastening member (element 3) is a hook, but fail to disclose that the second fastening member (element 17) is also a hook for coupling with the second fastened member of the diffuser plate.

Therefore, claims 8 and 14 are deemed non-obvious over the cited prior art.

### ***Response to Arguments***

Applicant's arguments with respect to claim 1-17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Ying P. Chen whose telephone number is (571)272-8444.

The examiner can normally be reached on 8:00-5:00 M-F.

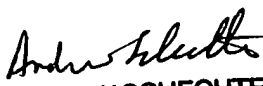
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Ying P Chen  
Examiner  
Art Unit 2871

WPC  
10/24/05

  
ANDREW SCHECHTER  
PRIMARY EXAMINER